

WO 2005/073725

EX05-005patentin.txt  
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EX05-005patentin.txt

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EX05-005patentin.txt

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EX05-005patentin.txt

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 <213> Homo sapiens

<400> 5

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Val Val Ile Phe Ser Leu Tyr Leu Met Leu Asp Arg Gly His Leu Asp  
 20 25 30

Tyr Pro Arg Asn Pro Arg Arg Glu Gly Ser Phe Pro Gln Gly Gln Leu  
 35 40 45

Ser Met Leu Gln Glu Lys Ile Asp His Leu Glu Arg Leu Leu Ala Glu  
 50 55 60

Asn Asn Glu Ile Ile Ser Asn Ile Arg Asp Ser Val Ile Asn Leu Ser  
 65 70 75 80

Glu Ser Val Glu Asp Gly Pro Lys Ser Ser Gln Ser Asn Phe Ser Gln  
 85 90 95

Gly Ala Gly Ser His Leu Leu Pro Ser Gln Leu Ser Leu Ser Val Asp  
 100 105 110

Thr Ala Asp Cys Leu Phe Ala Ser Gln Ser Gly Ser His Asn Ser Asp  
 115 120 125

Val Gln Met Leu Asp Val Tyr Ser Leu Ile Ser Phe Asp Asn Pro Asp  
 130 135 140

Gly Gly Val Trp Lys Gln Gly Phe Asp Ile Thr Tyr Glu Ser Asn Glu  
 145 150 155 160

Trp Asp Thr Glu Pro Leu Gln Val Phe Val Val Pro His Ser His Asn  
 165 170 175

Asp Pro Gly Trp Leu Lys Thr Phe Asn Asp Tyr Phe Arg Asp Lys Thr  
 180 185 190

Gln Tyr Ile Phe Asn Asn Met Val Leu Lys Leu Lys Glu Asp Ser Arg  
 195 200 205

Arg Lys Phe Ile Trp Ser Glu Ile Ser Tyr Leu Ser Lys Trp Trp Asp  
 210 215 220

Ile Ile Asp Ile Gln Lys Lys Asp Ala Val Lys Ser Leu Ile Glu Asn  
 225 230 235 240

EX05-005patentin.txt

Gly Gln Leu Glu Ile Val Thr Gly Gly Trp Val Met Pro Asp Glu Ala  
 245 250 255

Thr Pro His Tyr Phe Ala Leu Ile Asp Gln Leu Ile Glu Gly His Gln  
 260 265 270

Trp Leu Glu Asn Asn Ile Gly Val Lys Pro Arg Ser Gly Trp Ala Ile  
 275 280 285

Asp Pro Phe Gly His Ser Pro Thr Met Ala Tyr Leu Leu Asn Arg Ala  
 290 295 300

Gly Leu Ser His Met Leu Ile Gln Arg Val His Tyr Ala Val Lys Lys  
 305 310 315 320

~~His Phe Ala Leu His Lys Thr Leu Glu Phe Phe Trp Arg Gln Asn Trp~~  
 325 330 335

Asp Leu Gly Ser Val Thr Asp Ile Leu Cys His Met Met Pro Phe Tyr  
 340 345 350

Ser Tyr Asp Ile Pro His Thr Cys Gly Pro Asp Pro Lys Ile Cys Cys  
 355 360 365

Gln Phe Asp Phe Lys Arg Leu Pro Gly Gly Arg Phe Gly Cys Pro Trp  
 370 375 380

Gly Val Pro Pro Glu Thr Ile His Pro Gly Asn Val Gln Ser Arg Ala  
 385 390 395 400

Arg Met Leu Leu Asp Gln Tyr Arg Lys Lys Ser Lys Leu Phe Arg Thr  
 405 410 415

Lys Val Leu Leu Ala Pro Leu Gly Asp Asp Phe Arg Tyr Cys Glu Tyr  
 420 425 430

Thr Glu Trp Asp Leu Gln Phe Lys Asn Tyr Gln Gln Leu Phe Asp Tyr  
 435 440 445

Met Asn Ser Gln Ser Lys Phe Lys Val Lys Ile Gln Phe Gly Thr Leu  
 450 455 460

Ser Asp Phe Phe Asp Ala Leu Asp Lys Ala Asp Glu Thr Gln Arg Asp  
 465 470 475 480

Lys Gly Gln Ser Met Phe Pro Val Leu Ser Gly Asp Phe Phe Thr Tyr  
 485 490 495

Ala Asp Arg Asp Asp His Tyr Trp Ser Gly Tyr Phe Thr Ser Arg Pro  
 500 505 510

EX05-005patentin.txt

Phe Tyr Lys Arg Met Asp Arg Ile Met Glu Ser His Leu Arg Ala Ala  
 515 520 525

Glu Ile Leu Tyr Tyr Phe Ala Leu Arg Gln Ala His Lys Tyr Lys Ile  
 530 535 540

Asn Lys Phe Leu Ser Ser Ser Leu Tyr Thr Ala Leu Thr Glu Ala Arg  
 545 550 555 560

Arg Asn Leu Gly Leu Phe Gln His His Asp Ala Ile Thr Gly Thr Ala  
 565 570 575

Lys Asp Trp Val Val Val Asp Tyr Gly Thr Arg Leu Phe His Ser Leu  
 580 585 590

~~Met Val Leu Glu Lys Ile Ile Gly Asn Ser Ala Phe Leu Leu Ile Leu~~  
 595 600 605

Lys Asp Lys Leu Thr Tyr Asp Ser Tyr Ser Pro Asp Thr Phe Leu Glu  
 610 615 620

Met Asp Leu Lys Gln Lys Ser Gln Asp Ser Leu Pro Gln Lys Asn Ile  
 625 630 635 640

Ile Arg Leu Ser Ala Glu Pro Arg Tyr Leu Val Val Tyr Asn Pro Leu  
 645 650 655

Glu Gln Asp Arg Ile Ser Leu Val Ser Val Tyr Val Ser Ser Pro Thr  
 660 665 670

Val Gln Val Phe Ser Ala Ser Gly Lys Pro Val Glu Val Gln Val Ser  
 675 680 685

Ala Val Trp Asp Thr Ala Asn Thr Ile Ser Glu Thr Ala Tyr Glu Ile  
 690 695 700

Ser Phe Arg Ala His Ile Pro Pro Leu Gly Leu Lys Val Tyr Lys Ile  
 705 710 715 720

Leu Glu Ser Ala Ser Ser Asn Ser His Leu Ala Asp Tyr Val Leu Tyr  
 725 730 735

Lys Asn Lys Val Glu Asp Ser Gly Ile Phe Thr Ile Lys Asn Met Ile  
 740 745 750

Asn Thr Glu Glu Gly Ile Thr Leu Glu Asn Ser Phe Val Leu Leu Arg  
 755 760 765

Phe Asp Gln Thr Gly Leu Met Lys Gln Met Met Thr Lys Glu Asp Gly  
 770 775 780



EX05-005patentin.txt

Lys His His Glu Val Asn Val Gln Phe Ser Trp Tyr Gly Thr Thr Ile  
 785 790 795 800

Lys Arg Asp Lys Ser Gly Ala Tyr Leu Phe Leu Pro Asp Gly Asn Ala  
 805 810 815

Lys Pro Tyr Val Tyr Thr Thr Pro Pro Phe Val Arg Val Thr His Gly  
 820 825 830

Arg Ile Tyr Ser Glu Val Thr Cys Phe Phe Asp His Val Thr His Arg  
 835 840 845

Val Arg Leu Tyr His Ile Gln Gly Ile Glu Gly Gln Ser Val Glu Val  
 850 855 860

Ser Asn Ile Val Asp Ile Arg Lys Val Tyr Asn Arg Glu Ile Ala Met  
 865 870 875 880

Lys Ile Ser Ser Asp Ile Lys Ser Gln Asn Arg Phe Tyr Thr Asp Leu  
 885 890 895

Asn Gly Tyr Gln Ile Gln Pro Arg Met Thr Leu Ser Lys Leu Pro Leu  
 900 905 910

Gln Ala Asn Val Tyr Pro Met Thr Thr Met Ala Tyr Ile Gln Asp Ala  
 915 920 925

Lys His Arg Leu Thr Leu Leu Ser Ala Gln Ser Leu Gly Val Ser Ser  
 930 935 940

Leu Asn Ser Gly Gln Ile Glu Val Ile Met Asp Arg Arg Leu Met Gln  
 945 950 955 960

Asp Asp Asn Arg Gly Leu Glu Gln Gly Ile Gln Asp Asn Lys Ile Thr  
 965 970 975

Ala Asn Leu Phe Arg Ile Leu Leu Glu Lys Arg Ser Ala Val Asn Thr  
 980 985 990

Glu Glu Glu Lys Lys Ser Val Ser Tyr Pro Ser Leu Leu Ser His Ile  
 995 1000 1005

Thr Ser Ser Leu Met Asn His Pro Val Ile Pro Met Ala Asn Lys  
 1010 1015 1020

Phe Ser Pro Thr Leu Glu Leu Gln Gly Glu Phe Ser Pro Leu Gln  
 1025 1030 1035

Ser Ser Leu Pro Cys Asp Ile His Leu Val Asn Leu Arg Thr Ile  
 1040 1045 1050

EX05-005patentin.txt

Gln Ser Lys Val Gly Asn Gly His Ser Asn Glu Ala Ala Leu Ile  
 1055 1060 1065

Leu His Arg Lys Gly Phe Asp Cys Arg Phe Ser Ser Lys Gly Thr  
 1070 1075 1080

Gly Leu Phe Cys Ser Thr Thr Gln Gly Lys Ile Leu Val Gln Lys  
 1085 1090 1095

Leu Leu Asn Lys Phe Ile Val Glu Ser Leu Thr Pro Ser Ser Leu  
 1100 1105 1110

Ser Leu Met His Ser Pro Pro Gly Thr Gln Asn Ile Ser Glu Ile  
 1115 1120 1125

Asn Leu Ser Pro Met Glu Ile Ser Thr Phe Arg Ile Gln Leu Arg  
 1130 1135 1140

<210> 6  
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 <212> PRT  
 <213> Homo sapiens

<400> 6

Met Lys Leu Lys Lys Gln Val Thr Val Cys Gly Ala Ala Ile Phe Cys  
 1 5 10 15

Val Ala Val Phe Ser Leu Tyr Leu Met Leu Asp Arg Val Gln His Asp  
 20 25 30

Pro Thr Arg His Gln Asn Gly Gly Asn Phe Pro Arg Ser Gln Ile Ser  
 35 40 45

Val Leu Gln Asn Arg Ile Glu Gln Leu Glu Gln Leu Leu Glu Glu Asn  
 50 55 60

His Glu Ile Ile Ser His Ile Lys Asp Ser Val Leu Glu Leu Thr Ala  
 65 70 75 80

Asn Ala Glu Gly Pro Pro Ala Met Leu Pro Tyr Tyr Thr Val Asn Gly  
 85 90 95

Ser Trp Val Val Pro Pro Glu Pro Arg Pro Ser Phe Phe Ser Ile Ser  
 100 105 110

Pro Gln Asp Cys Gln Phe Ala Leu Gly Gly Arg Gly Gln Lys Pro Glu  
 115 120 125

Leu Gln Met Leu Thr Val Ser Glu Glu Leu Pro Phe Asp Asn Val Asp  
 130 135 140

Gly Gly Val Trp Arg Gln Gly Phe Asp Ile Ser Tyr Asp Pro His Asp

EX05-005patentin.txt

145

150

155

160

Trp Asp Ala Glu Asp<sub>165</sub> Leu Gln Val Phe Val<sub>170</sub> Val Pro His Ser His<sub>175</sub> Asn

Asp Pro Gly Trp<sub>180</sub> Ile Lys Thr Phe Asp<sub>185</sub> Lys Tyr Tyr Thr Glu<sub>190</sub> Gln Thr

Gln His Ile<sub>195</sub> Leu Asn Ser Met Val<sub>200</sub> Ser Lys Leu Gln Glu<sub>205</sub> Asp Pro Arg

Arg Arg<sub>210</sub> Phe Leu Trp Ala Glu<sub>215</sub> Val Ser Phe Phe<sub>220</sub> Ala Lys Trp Trp Asp

Asn Ile Asn Val Gln Lys Arg Ala Ala Val Arg<sub>235</sub> Arg Leu Val Gly Asn<sub>240</sub>

Gly Gln Leu Glu Ile<sub>245</sub> Ala Thr Gly Gly Trp<sub>250</sub> Val Met Pro Asp Glu<sub>255</sub> Ala

Asn Ser His Tyr<sub>260</sub> Phe Ala Leu Ile Asp<sub>265</sub> Gln Leu Ile Glu Gly<sub>270</sub> His Gln

Trp Leu Glu<sub>275</sub> Arg Asn Leu Gly Ala<sub>280</sub> Thr Pro Arg Ser Gly<sub>285</sub> Trp Ala Val

Asp Pro Phe Gly Tyr Ser Ser<sub>295</sub> Thr Met Pro Tyr Leu<sub>300</sub> Leu Arg Arg Ala

Asn Leu Thr Ser Met Leu<sub>310</sub> Ile Gln Arg Val His<sub>315</sub> Tyr Ala Ile Lys Lys<sub>320</sub>

His Phe Ala Ala Thr<sub>325</sub> His Ser Leu Glu Phe<sub>330</sub> Met Trp Arg Gln Thr<sub>335</sub> Trp

Asp Ser Asp Ser<sub>340</sub> Ser Thr Asp Ile Phe<sub>345</sub> Cys His Met Met Pro<sub>350</sub> Phe Tyr

Ser Tyr Asp Val<sub>355</sub> Pro His Thr Cys<sub>360</sub> Gly Pro Asp Pro Lys<sub>365</sub> Ile Cys Cys

Gln Phe Asp Phe Lys Arg Leu<sub>375</sub> Pro Gly Gly Arg Ile<sub>380</sub> Asn Cys Pro Trp

Lys Val Pro Pro Arg Ala<sub>390</sub> Ile Thr Glu Ala Asn<sub>395</sub> Val Ala Glu Arg Ala<sub>400</sub>

Ala Leu Leu Leu Asp<sub>405</sub> Gln Tyr Arg Lys Lys<sub>410</sub> Ser Gln Leu Phe Arg<sub>415</sub> Ser

Asn Val Leu Leu Val Pro Leu Gly Asp Asp Phe Arg Tyr Asp Lys Pro

EX05-005patentin.txt  
425

420

430

Gln Glu Trp Asp Ala Gln Phe Phe Asn Tyr Gln Arg Leu Phe Asp Phe  
435 440 445

Phe Asn Ser Arg Pro Asn Leu His Val Gln Ala Gln Phe Gly Thr Leu  
450 455 460

Ser Asp Tyr Phe Asp Ala Leu Tyr Lys Arg Thr Gly Val Glu Pro Gly  
465 470 475 480

Ala Arg Pro Pro Gly Phe Pro Val Leu Ser Gly Asp Phe Phe Ser Tyr  
485 490 495

Ala Asp Arg Glu Asp His Tyr Trp Thr Gly Tyr Tyr Thr Ser Arg Pro  
500 505 510

Phe Tyr Lys Ser Leu Asp Arg Val Leu Glu Ala His Leu Arg Gly Ala  
515 520 525

Glu Val Leu Tyr Ser Leu Ala Ala Ala His Ala Arg Arg Ser Gly Leu  
530 535 540

Ala Gly Arg Tyr Pro Leu Ser Asp Phe Thr Leu Leu Thr Glu Ala Arg  
545 550 555 560

Arg Thr Leu Gly Leu Phe Gln His His Asp Ala Ile Thr Gly Thr Ala  
565 570 575

Lys Glu Ala Val Val Val Asp Tyr Gly Val Arg Leu Leu Arg Ser Leu  
580 585 590

Val Asn Leu Lys Gln Val Ile Ile His Ala Ala His Tyr Leu Val Leu  
595 600 605

Gly Asp Lys Glu Thr Tyr His Phe Asp Pro Glu Ala Pro Phe Leu Gln  
610 615 620

Val Asp Asp Thr Arg Leu Ser His Asp Ala Leu Pro Glu Arg Thr Val  
625 630 635 640

Ile Gln Leu Asp Ser Ser Pro Arg Phe Val Val Leu Phe Asn Pro Leu  
645 650 655

Glu Gln Glu Arg Phe Ser Met Val Ser Leu Leu Val Asn Ser Pro Arg  
660 665 670

Val Arg Val Leu Ser Glu Glu Gly Gln Pro Leu Ala Val Gln Ile Ser  
675 680 685

Ala His Trp Ser Ser Ala Thr Glu Ala Val Pro Asp Val Tyr Gln Val



EX05-005patentin.txt  
700

690

695

Ser Val Pro Val Arg Leu Pro Ala Leu Gly Leu Gly Val Leu Gln Leu  
705 710 715 720

Gln Leu Gly Leu Asp Gly His Arg Thr Leu Pro Ser Ser Val Arg Ile  
725 730 735

Tyr Leu His Gly Arg Gln Leu Ser Val Ser Arg His Glu Ala Phe Pro  
740 745 750

Leu Arg Val Ile Asp Ser Gly Thr Ser Asp Phe Ala Leu Ser Asn Arg  
755 760 765

Tyr Met Gln Val Trp Phe Ser Gly Leu Thr Gly Leu Leu Lys Ser Ile  
770 775 780

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Arg Arg Val Asp Glu Glu His Glu Gln Gln Val Asp Met Gln Val Leu  
785 790 795 800

Val Tyr Gly Thr Arg Thr Ser Lys Asp Lys Ser Gly Ala Tyr Leu Phe  
805 810 815

Leu Pro Asp Gly Glu Ala Ser Pro Thr Ser Pro Arg Ser Pro Pro Cys  
820 825 830

Cys Val Ser Leu Lys Ala Leu Ser Ser Gln Arg Trp Leu Arg Thr Met  
835 840 845

Ser Thr Phe Thr Arg Arg Ser Gly Phe Thr Ile Cys Gln Gly Trp Arg  
850 855 860

Gly Cys Leu Trp Thr Tyr His Pro Trp Trp Thr Ser Gly Thr Thr Ser  
865 870 875 880

Thr Arg Ser Trp Pro Cys Thr Ser Ile Gln Thr Ser Thr Ala Arg Val  
885 890 895

Gln Pro Arg Arg Tyr Leu Lys Lys Leu Pro Leu Gln Ala Asn Phe Tyr  
900 905 910

Pro Met Pro Val Met Ala Tyr Ile Gln Asp Ala Gln Lys Arg Leu Thr  
915 920 925

Leu His Thr Ala Gln Ala Leu Gly Val Ser Ser Leu Lys Asp Gly Gln  
930 935 940

Leu Glu Val Ile Leu Asp Arg Arg Leu Met Gln Asp Asp Asn Arg Gly  
945 950 955 960

Leu Gly Gln Gly Leu Lys Asp Asn Lys Arg Thr Cys Asn Arg Phe Arg

EX05-005patentin.txt  
970

965

975

Leu Leu Leu Glu Arg Arg Thr Val Gly Ser Glu Val Gln Asp Ser His  
980 985 990

Ser Thr Ser Tyr Pro Ser Leu Leu Ser His Leu Thr Ser Met Tyr Leu  
995 1000 1005

Asn Ala Pro Ala Leu Ala Leu Pro Val Ala Arg Met Gln Leu Pro  
1010 1015 1020

Gly Pro Gly Leu Arg Ser Phe His Pro Leu Ala Ser Ser Leu Pro  
1025 1030 1035

Cys Asp Phe His Leu Leu Asn Leu Arg Thr Leu Gln Ala Glu Glu  
1040 1045 1050

Asp Thr Leu Pro Ser Ala Glu Thr Ala Leu Ile Leu His Arg Lys  
1055 1060 1065

Gly Phe Asp Cys Gly Leu Glu Ala Lys Asn Leu Gly Phe Asn Cys  
1070 1075 1080

Thr Thr Ser Gln Gly Lys Val Ala Leu Gly Ser Leu Phe His Gly  
1085 1090 1095

Leu Asp Val Val Phe Leu Gln Pro Thr Ser Leu Thr Leu Leu Tyr  
1100 1105 1110

Pro Leu Ala Ser Pro Ser Asn Ser Thr Asp Val Tyr Leu Glu Pro  
1115 1120 1125

Met Glu Ile Ala Thr Phe Arg Leu Arg Leu Gly  
1130 1135